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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,517	11/14/2003	Doron Gamliel	967AAB	8672

7590 11/30/2004  
Kevin Redmond  
6960 SW Gator Trail  
Palm City, FL 34990

EXAMINER
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
HAM, SEUNGSOOK

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/712,517	GAMLIEL, DORON	
	Examiner	Art Unit	
	Seungsook Ham	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: In page 10, line 10, the numeral, "21A" should be corrected to --21H--.

Appropriate correction is required.

### ***Claim Objections***

Claim 21 is objected to because of the following informalities: There are two claims that are identified as "21". The first occurrence of "claim 21" should be corrected to --claim 20'--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13, lines 11 and 12, "the ground plane extending from the center portion **toward but not** to the first and second terminals" is confusing as to the location of the ground plane.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2817

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6-8, 11-15, 18, 19, 21 (second occurrence) and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto et al. (US '553).

Sakamoto et al. (figs. 8-12) discloses a filter comprising: a first, second, and third dielectric layers (see figs. 11 and 12) to form a multi-layered dielectric block; a first terminal 20A located on the first side surface 1b and having a first portion wrapping around onto the top surface, the bottom surface, the third side surface and the fourth side surface; a second terminal 20B located on the second side surface 1c (see fig. 1) and having a second portion wrapping around onto the top surface, the bottom surface, the third side surface and the fourth side surface; a third terminal 18A located on the third side surface 1a and wrapping around onto the top and bottom surface; a fourth terminal 18B located on the fourth side surface 1e and wrapping around onto the top and bottom surfaces; and a ground plane 16 or 26 (see fig. 11) located between the second and third dielectric layers, a length of the ground plane being less than a distance between the first and second portions (see fig. 11, the ground plane 26 or 16 does not overlap with the first and second portions of the first and second terminals 20A, 20B, respectively).

Regarding claims 6 and 22, it is inherent from the device of Sakamoto et al. that the ground plane improves isolation between the first and second terminals since the ground plane 26 does not overlap with the first and second terminals 20A, 20B.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5, 9, 10, 16, 17 and 21 (first occurrence) are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto et al. (US '553).

Regarding claim 3, providing the ground plane with a width that is less than a distance between the third and fourth side surfaces considered as an obvious modification since it does not alter the filter characteristics.

Regarding claims 4, 10, and 17, it would have been obvious to use ceramic material as the dielectric layer 14 in the device of Sakamoto et al. since it is well known in the art to use ceramic material as a dielectric layer/substrate in electrical filters.

Regarding claims 5, 9, 16 and 21 (first occurrence), providing vias to connect the ground plane to third and fourth terminals are considered as a matter of design choice since via connection is well known in the art.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koga et al. (JP '068).

Koga et al. (figs. 1-6) discloses a filter comprising: a first (the first two dielectric layers 26, 10), second (the dielectric layer that has capacitor electrodes 8), and third (the dielectric layer that has ground electrode 7b, inductor electrode 9 and the bottom dielectric layer 10) dielectric/ceramic layers to form a multi-layered dielectric block; a

Art Unit: 2817

first terminal 3 located on the first side surface 1b and having a first portion wrapping around onto the top surface and the bottom surface; a second terminal 4 located on the second side surface and having a second portion wrapping around onto the top surface and the bottom surface; a third terminal 5 located on the third side surface and wrapping around onto the top and bottom surface; a fourth terminal 6 located on the fourth side surface 1e and wrapping around onto the top and bottom surfaces; and a ground plane 7b located between the second and third dielectric layers, a length of the ground plane being less than a distance between the first and second portions (see fig. 1, the ground plane 7b does not overlap with the first and second portions of the first and second terminals 1, 4, respectively. Koga et al. does not show the first and second terminals are wrapped around side surfaces. However, such wrapping technique is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art to provide the first and second terminals wrapped around the side surfaces in the device of Koga et al. since such technique is well known in the art.

Regarding claims 6 and 22, it is inherent from the device of Koga et al. that the ground plane improves isolation between the first and second terminals since the ground plane 7a-7c does not overlap with the first and second terminals 1, 4 (see fig. 3 and paragraph [0027]).

Regarding claim 3, Koga et al. also shows the ground plane with a width that is less than a distance between the third and fourth side surfaces.

Art Unit: 2817

Regarding claims 5, 9, 16 and 21 (first occurrence), providing vias to connect the ground plane to third and fourth terminals are considered as a matter of design choice since via connection is well known in the art.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kaneko et al. (US '366), Nakamura et al. (US '357) and Azuma et al. (JP '335) disclose a laminated type dielectric filters; and


Yamaguchi (US '458) and Takada et al. (US '452) disclose a laminated filter using via to connect electrodes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seungsook Ham whose telephone number is (571) 272-2405. The examiner can normally be reached on Monday-Thursday, 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2817

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Seungsook Ham  
Primary Examiner  
Art Unit 2817

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